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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/722,888

11/26/2003

Mary Jean Cash

10290

1668

7590

01/11/2007

Hercules Incorporated
Hercules Plaza
1313 N. Market Street
Wilmington, DE 19894-0001

EXAMINER

ISSAC, ROY P

ART UNIT

PAPER NUMBER

1623

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

01/11/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/722,888

Applicant(s)

CASH ET AL.

Examiner

Roy P. Issac

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1623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
4a) Of the above claim(s) 4-6 and 9-31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 7 and 8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 6/9/04; 5/27/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

This application claims priority under 35 U.S.C § 119(e) from the provisional application 60/429,291 filed 11/26/2002.

Election/Restrictions

Applicant's election of Group I, claims 1-3 and 7-8 in the reply filed on 12 December, 2006 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Because these inventions are independent or distinct for the reasons set forth in the restriction requirement mailed 12 October, 2006 and because the response was made without pointing out any supposed errors, the requirement is deemed proper and is therefore made FINAL.

Claims 4-6 and 9-21 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected inventions, there being no allowable generic or linking claim. Applicant timely traversed the restriction requirement in the reply filed on 12 December, 2006.

Therefore, claims 1-3 and 7-8 are examined on the merits herein.

Claim Objections

Claim 3 is objected to because of the following informalities: The term "thixotropic" is misspelled. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The recitation "less than" is not clearly defined in the specification. The lack of lower limit in the ranges claimed renders the claims indefinite.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Bormeister et. al. (German Patent No. 233,377 A1 English Translation; PTO-1449, Included by the applicant).

Bormeister et. al. discloses a carboxymethylcellulose that forms highly thixotropic aqueous solutions and reversible gels and has thickening effects.

(Abstract). Note that the range claimed in the instant application, "less than 0.9"

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or "less than 0.8" is considered to include a urea content of zero as well. As such, claims 1-3 are deemed anticipated by Bormeister et. al.

Claims 1-2, 7 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Kamide et. al. (U.S. Patent No. 4,579,943; PTO-1449, Included by the applicant).

Kamide et. al. discloses the synthesis of carboxymethylcellulose, with a degree of substitution of 0.1 to 0.64. (Abstract). Kamide et. al. discloses carboxymethylcellulose having urea/water ratio of 1.94/97.09. (Example 4, Column 13, lines 5-10). Kamide discloses a carboxymethylcellulose with degrees of substitutions ranging from 0.09 to 0.75. (Example 2, Table 2; Columns 9-10). The CMC was prepared using 10g of regenerated cellulose immersed in 50g of a 5% by weight solution of NaOH (stoichiometric by weight), and further reacting with sodium monochloroacetate. Note that claims 7 and 8 are in the product-by-process format. The CMC of Kamide appears to be the same product as the instant application because it is prepared by a similar procedure and has degree of substitution overlapping with that claimed herein. When the reference teaches a product that appears to be the same as, or an obvious variant of, the product set forth in a product-by-process claim although produced by a different process. See *In re Marosi*, 710 F.2d 799, 218 USPQ 289 (Fed. Cir. 1983) and *In re Thorpe*, 777 F.2d 695, 227 USPQ 964 (Fed. Cir. 1985). See also MPEP § 2113. The applicant has noted that the CMCs of Kamida are

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of relatively low degree of substitution. However, the range of Kamida's degree of substitution (0.1 to 0.64) overlaps with the claimed degree of substitution (about 0.6 to about 1.2) in the instant application. The applicant has asserted that the CMCs of the current invention are derived from Cellulose I, not cellulose II or regenerated cellulose. (Specification, Page 2, Paragraph 2) However, the claims are not limited to cellulose I. The product made by the procedure as claimed is deemed to be the same as that of Kamide et. al.

No Claim is allowed.

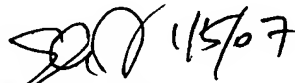
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roy P. Issac whose telephone number is 571-272-2674. The examiner can normally be reached on 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shaojia Anna Jiang can be reached on 571-272-0627. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Roy P. Issac
Patent Examiner
Art Unit 1623


S. Anna Jiang, Ph.D.
Supervisory Patent Examiner
Art Unit 1623